

# EXHIBIT 4

1 UNITED STATES DISTRICT COURT  
2 IN AND FOR THE DISTRICT OF WYOMING

3 STEPHANIE WADSWORTH, )  
individually and as )  
4 Parent and Legal ) CASE NO.  
Guardian of W.W., K.W., ) 2:23-cv-00118-NDF  
5 G.W., and L.W., minor )  
children, and MATTHEW )  
6 WADSWORTH, )  
)  
7 Plaintiffs, )  
)  
8 v. )  
)  
9 WALMART, INC. and JETSON )  
ELECTRIC BIKES, LLC, )  
10 )  
Defendants. )  
11  
12

13 ORAL DEPOSITION OF  
14 DEREK A. KING, M.S., P.E.  
15 MONDAY, AUGUST 19, 2024  
16  
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18  
19  
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21

22 REPORTED BY:

23 DEBRA A. DIBBLE, FAPR, RDR, CRR, CRC, Notary Public

24 California CSR 14345

25 JOB NO. 44990

1 job during -- was it your last year of school?

2 A. Yeah.

3 Q. And then once you graduated from

4 UC Berkeley, that's when you went to work for BEAR?

5 A. Yes.

6 Q. Was that job at BEAR, was -- did you have

7 any jobs in between BEAR and the time you graduated

8 UC Berkeley?

9 A. No.

10 Q. So it sounds like, for all intents and

11 purposes, for your professional career, it has

12 always been at BEAR?

13 A. Yes.

14 Q. Have you ever -- or strike that.

15 You haven't ever worked for a company

16 that designs or manufactures lithium-ion battery

17 products, correct?

18 A. Correct.

19 Q. And you have never personally designed or

20 manufactured a lithium-ion battery product, correct?

21 A. Correct.

22 Q. And you have never been involved in the

23 design or manufacture of a lithium-ion battery pack,

24 correct?

25 A. Correct.

1 A. I think he was the first one on scene, if  
2 I remember correctly.

3 Q. He was the good samaritan that assisted  
4 in getting the Wadsworth family out of the house.

5 You're not aware of any statements he  
6 would have said on that body camera footage about  
7 where he first saw fire, correct?

8 A. Correct.

9 Q. Do you know what UL codes are applicable  
10 to the design and manufacture of this hoverboard?

11 A. I believe there's the UL -- I want to say  
12 2722, if I remember the number correctly.

13 Q. You were close. It's UL 2272.

14 A. 2272. Okay.

15 Q. Any other UL codes that you are aware of  
16 that would apply to the design or manufacture of  
17 this hoverboard?

18 A. I know there's another one that deals  
19 with lithium-ion batteries. I don't recall the  
20 number offhand.

21 Q. Okay.

22 A. Yeah.

23 Q. Do you know what the -- so you don't know  
24 what the UL code is that applies to the specific  
25 lithium-ion battery cells, correct?

1 A. Correct. Not offhand.

2 Q. And in this case, it's your opinion that

3 two of the -- two of the ten battery cells that were

4 in this battery pack experienced an internal short

5 circuit with thermal runaway. Correct?

6 A. Yes.

7 Q. And you've identified those in your

8 report as cells 4 and 10?

9 A. Yes.

10 Q. So you believe that it is a -- an issue

11 with the lithium-ion battery cells, for cell 4 and

12 10, that caused this fire? At least that's your

13 opinion in this case, correct?

14 A. Yes.

15 Q. But you don't know what UL code applies

16 to these specific lithium-ion battery cells?

17 A. I don't recall the number.

18 Q. Do you know if the lithium-ion battery

19 cells in this hoverboard were UL listed?

20 A. I did not check that, so I don't know.

21 (King Deposition Exhibit 72 marked.)

22 BY MR. LAFLAMME:

23 Q. We'll mark as Exhibit 72, this is a copy

24 of a PowerPoint presentation that you went

25 through -- or at least put together, correct?

1 here it shows the battery cell from an exemplar  
2 Plasma unit, correct?

3 A. Yes.

4 Q. And how is it that you obtained the  
5 exemplar Plasma unit?

6 A. I purchased.

7 Q. From where?

8 A. eBay.

9 Q. When did you purchase the exemplar  
10 Plasma?

11 A. Should be a few months ago. I don't  
12 remember exactly.

13 Q. Had you purchased the exemplar Plasma  
14 before the lab inspection that we were at at your  
15 place in February?

16 A. No.

17 Q. Did you do anything to determine who the  
18 manufacturer was of the battery cell for the Plasma  
19 unit?

20 A. No. My understanding is JDDL is the name  
21 of a manufacturer, but beyond that...

22 Q. Do you know which manufacturer name that  
23 is?

24 A. No.

25 Q. Have you seen any of the document

1 productions that Jetson has made in this case?

2 A. I don't believe so.

3 Q. You haven't seen any of the UL test

4 reports or certification records in this case?

5 A. I have not.

6 Q. We'll mark this as 74.

7 (King Deposition Exhibit 74 marked.)

8 BY MR. LAFLAMME:

9 Q. Handing you what's been marked as  
10 Exhibit 74, which is a Bates document that starts  
11 with JETSON 311.

12 Do you see that in the lower right-hand  
13 corner?

14 A. Yes.

15 Q. And you have not seen this before,  
16 correct?

17 A. Correct.

18 Q. If you go to the second page of this  
19 document, there's a description of this battery.  
20 And you can see the model number is INR, all  
21 capitalized, 18650P.

22 Do you see that?

23 A. Yes.

24 Q. And that's the same model number on this  
25 battery cell, correct?

1 Q. Do you know if a short-circuit test was  
2 done as part of the UL certification and test  
3 process?

4 A. I believe so, yes.

5 Q. And now in looking at this document, you  
6 are aware that UL 2580 is the standard that applies  
7 to battery cells, lithium-ion battery cells,  
8 correct?

9 A. Yes.

10 Q. You did not know that prior to looking at  
11 this document, correct?

12 A. I did not recall the document number, the  
13 UL number.

14 Q. Did you consult with UL 2580 at all in  
15 your analysis in this case?

16 A. No.

17 Q. And you don't reference UL 2580 at all in  
18 your report, correct?

19 A. Correct.

20 Q. Are you aware of a recall that Jetson had  
21 on a different hoverboard model?

22 A. Yes.

23 Q. What is your awareness of that?

24 A. I believe it was the Rogue model, model  
25 name. I -- if I recall correctly, it was related to



1 possible -- a possible fire hazard.

2 Q. Okay.

3 A. But that's the extent of my recollection.

4 Q. So it sounds like your knowledge of the

5 recall on the Rogue model is more general as opposed

6 to any in-depth analysis that you've done on that

7 issue.

8 A. Correct.

9 Q. Do you even know what type of battery

10 cells the Rogue model had compared to the Plasma?

11 A. No.

12 Q. You are aware from reviewing Mr. Husain's

13 deposition testimony from Jetson that the battery

14 cells were from a different manufacturer?

15 A. That sounds familiar, him saying so.

16 Q. So the battery manufacturer that we have

17 for the Plasma model is --

18 MR. LAFLAMME: I'm just going to let

19 you type that.

20 BY MR. LAFLAMME:

21 Q. -- Jiangxi Jiuding Power.

22 MR. LAFLAMME: And that's probably

23 good enough.

24 BY MR. LAFLAMME:

25 Q. I'm going to try to say this

1 phonetically. Is -- actually, I'm not even going to

2 try to say it.

3 The battery manufacturer is listed on the

4 first page of Exhibit 74, correct?

5 A. Yes.

6 Q. And you don't know whether that's the

7 same battery manufacturer for the lithium-ion

8 battery cell that was involved in the Rogue model,

9 correct?

10 A. Correct.

11 Q. And you did not do anything to assess

12 that issue?

13 A. Correct.

14 Q. All right. Going to page 8.

15 A. Of which?

16 Q. Oh, I'm sorry. Of your PowerPoint, which

17 is Exhibit 72. All right.

18 Looking at page 8 of Exhibit 72, this is

19 what appears to be just a comparison from the

20 exemplar compared to the subject unit, correct?

21 A. Yes.

22 Q. And then if we go to page 9 of your

23 PowerPoint, this is when you remove the exemplar

24 battery pack, correct?

25 A. Yes.

1 circuit, we talked about how the anode and cathode  
2 need to communicate, correct?

3 A. Yes.

4 Q. And the -- in between the anode and  
5 cathode within an 18650 cell is a separator,  
6 correct?

7 A. Yes.

8 Q. And what is the separator made out of?

9 A. It's typically a polymer, a porous  
10 polymer.

11 Q. So in order for the short circuit to  
12 occur in cells 4 and 10, you need to have a failure  
13 of the separator, correct?

14 A. Yes.

15 Q. If the separator doesn't fail, then there  
16 is no way for a short circuit to occur, correct?

17 A. That's right.

18 Q. And the separator is -- it's independent  
19 to each cell, correct?

20 A. Each cell has its own separator.

21 Q. Right. So -- I guess what I'm getting at  
22 is, so each of the ten cells has its own separator  
23 between the anode and cathode, correct?

24 A. Yes.

25 Q. So in order to get a short at cells 4 and

1 10, both of those separators, so the separator in  
2 cell 4 and the separator in cell 10 would need to  
3 fail in order to get the communication from the  
4 anode and cathode.

5 A. Yes.

6 Q. And both of those separators would have  
7 to fail at the same time in order to get a short in  
8 cells 4 and 10, correct?

9 A. I don't see a timing requirement for  
10 those to be synchronized.

11 Q. Well, in order to get -- because we just  
12 talked about how you have cells 4 and 10, those are  
13 the two cells that had a short circuit, correct?

14 A. Yes.

15 Q. And both of those cells, when they had  
16 their short circuit, you talked about how your --  
17 the progression of the failure was that the end caps  
18 would have come off on cells 4 and 10, then you'd  
19 get the internal contents and some flame on the  
20 internal portions of the hoverboard, which would  
21 then ignite combustibles by cells 4 and 10, correct?

22 A. Yes.

23 Q. And cells 4 and 10 would have failed at  
24 the same time, correct?

25 MR. AYALA: Form.

1 A. Approximately, yeah.

2 BY MR. LAFLAMME:

3 Q. So in order to get the cells 4 and 10 to  
4 short circuit, both of their separators would have  
5 had to fail at approximately the same time, correct?

6 A. Yes.

7 Q. Have you ever had any other hoverboard  
8 cases where you believe there was a short circuit in  
9 two different cells at approximately the same time?

10 A. I have not personally had any other  
11 hoverboard cases.

12 Q. Okay. How about any other lithium-ion  
13 battery cases, any others that you can identify  
14 where you believe the -- two of -- at least two of  
15 the battery cells within the battery pack failed at  
16 approximately the same time due to a short circuit?

17 A. Not -- nothing comes to mind.

18 Q. Okay. If you could pull out your  
19 PowerPoint again, and go to the page of the CT scan.

20 Were you able to -- was there any arcing  
21 that was found on any wires within the hoverboard?

22 A. Not that I observed.

23 Q. Was there any arcing -- or are you aware  
24 of any arcing that was found on any wires related to  
25 the Wadsworth house at the site?



1 A. I thought someone mentioned a possible

2 arc outside. I'm not certain that --

3 Q. So you are aware that there has at least

4 been some discussions about some arcing that may

5 have been found on some wires outside of the

6 residence?

7 A. Yes, at least some discussion of that

8 possibility.

9 Q. Do you know where that arcing was

10 located?

11 A. Somewhere related to the shed, the

12 smoking shed.

13 Q. So you are aware at least of at least

14 some discussion about some arcing that was

15 identified at the smoking shed outside of the

16 residence, correct?

17 A. Yes.

18 Q. Are you aware of any arcing that was

19 identified inside the residence, the internal house

20 wiring?

21 A. No, I'm not.

22 Q. And this hoverboard was located just in

23 front of an electrical outlet, correct?

24 A. I believe so, yes.

25 Q. And you're not aware of any arcing that

1 was located on that electrical outlet or the

2 associated wires, correct?

3 A. I'm not aware of any.

4 Q. And arcing within a fire occurs when an  
5 electrical line is hit by flames or high heat and it  
6 is energized, correct?

7 A. Yeah. If the insulation between the  
8 electrified lines goes away and they contact each  
9 other, then you can get an arc.

10 Q. And one of the tenets -- or one of the  
11 necessities in order to have an arc to occur on an  
12 electrical wire is that it needs to be energized,  
13 correct?

14 A. Yes.

15 Q. Do you know where the electrical service  
16 came into the house at the Wadsworth residence?

17 A. No.

18 Q. And do you know where the electrical  
19 service came into the house in relation to where the  
20 smoking shed was located?

21 A. No.

22 Q. Have you seen any photographs of the  
23 arcing that was identified at the smoking shed?

24 A. No.

25 Q. Looking at the CT scan that you have in

1 BY MR. LAFLAMME:

2 Q. Just to be real clear, is there any  
3 aspect of this hoverboard that you believe deviated  
4 from UL 2272 standards?

5 MR. AYALA: Form.

6 A. No, other than I believe it's more likely  
7 to be a source of fire, but...

8 No, I haven't reviewed the design  
9 documentation for this board.

10 BY MR. LAFLAMME:

11 Q. You haven't reviewed the design  
12 documentation or any of the UL test records for this  
13 hoverboard, correct?

14 A. Correct.

15 Q. And you haven't reviewed any of the UL  
16 test records for the battery cells in this  
17 hoverboard, correct?

18 A. Correct.

19 Q. On page 4 of your report, it goes through  
20 materials reviewed, and those are all of the  
21 materials that you had reviewed at the time of your  
22 report, correct?

23 A. Yes.

24 Q. And then the only additional material  
25 that you've reviewed was skimming through Detective



1 lithium-ion battery case is this one?

2 A. Yes.

3 Q. And the only one in which you've ever sat  
4 for a deposition related to a lithium-ion -- an  
5 alleged lithium-ion battery fire is this case,  
6 correct?

7 A. Yes.

8 Q. And the only case in which you've been  
9 named as an expert, disclosed as an expert for a  
10 lithium-ion battery case, involving an alleged fire  
11 is this one?

12 A. Yes.

13 Q. You indicated that you considered the  
14 possibility of the fire not starting at the  
15 hoverboard as part of your investigation in this to  
16 Attorney Ayala.

17 Do you recall that?

18 A. Yes.

19 Q. But then later, you said the scope of  
20 your work was to only look at the hoverboard  
21 evidence, correct?

22 A. Was to look at the hoverboard evidence to  
23 see if it is consistent or not with internal -- with  
24 being a fire origin.

25 Q. You have not done anything to assess

1 whether the fire could have started at the smoking

2 shed, correct?

3 A. Correct.

4 Q. And the only physical evidence that you  
5 have looked at is the hoverboard, correct?

6 A. Yes.

7 Q. And you'll agree that lithium-ion battery  
8 cells can fail when they are subject to an external  
9 fire attack?

10 A. Yes.

11 Q. And you don't -- you haven't done any  
12 assessment to determine how this fire may have moved  
13 through the Wadsworth structure, correct?

14 A. Correct.

15 Q. One of the things that you said is that

16 an internal short within a lithium-ion battery

17 should only affect that singular cell.

18 Do you recall that?

19 A. Yes.

20 Q. And in this case, you're saying that two

21 singular cells had a short circuit, correct?

22 A. Yes.

23 Q. So at substantially the same time, two

24 different cells in two different parts of this

25 battery pack had a failure of the separators within

1 those individual cells, correct?

2 A. Yes.

3 Q. And they had a failure of the separator

4 at substantially the same time to the extent that

5 they both short-circuited at substantially the same

6 time.

7 That's your theory, correct?

8 A. That's what it -- that's what it appears

9 to be.

10 Q. Have you ever had another case where two

11 individual cells short-circuited at the same time?

12 A. No.

13 Q. That would be pretty unusual, wouldn't

14 it?

15 MR. AYALA: Form.

16 A. It's unusual, so far.

17 BY MR. LAFLAMME:

18 Q. Meaning you have to have an individual

19 failure within cell 4, at substantially the same

20 time as you have an individual but completely

21 separate failure at cell 10, correct?

22 A. Yes.

23 Q. That's what you're saying in this case.

24 MR. AYALA: Form.

25 He's said what he's saying.

1 A. Yes. Yes. I believe it's a coincidence,

2 but that's what appears to have occurred.

3 BY MR. LAFLAMME:

4 Q. Have you done any research to determine

5 the percentage chance of that coincidence?

6 A. No.

7 MR. AYALA: Form.

8 BY MR. LAFLAMME:

9 Q. The individual cell itself, the

10 conditions that we see cells 4 and 10 in after the

11 fire, those conditions would have the same

12 appearance if it was an external fire attack as

13 well, correct?

14 A. Yes. For those individual cells, yes.

15 Q. Meaning when lithium-ion battery cells

16 fail in a fire due to a fire attack, the appearance

17 is similar to what we see the two cells that have

18 failed in this case.

19 A. Yes.

20 Q. You were asked if it's possible to have a

21 short -- an internal short with the cell -- or,

22 sorry, with the hoverboard not plugged in.

23 Do you recall that?

24 A. Yes.

25 Q. You'd agree with me that it's very

1 MR. AYALA: Form.

2 A. Yes, I believe there would be.

3 BY MR. LAFLAMME:

4 Q. Meaning if the hoverboard is plugged in,  
5 while some of the wires may not be energized, there  
6 would certainly be some internal wires that are  
7 energized when it's plugged in?

8 A. Yes, the -- let's see. There would be,  
9 at least from the charger port into probably the  
10 DMS. And that's probably at a fairly low  
11 energization, if the battery -- if it's fully  
12 charged.

13 Q. That section of wiring, though, would  
14 have power to it, correct, meaning it would be  
15 energized?

16 A. Yes.

17 Q. And it would be energized to the extent  
18 that had it been attacked by fire while plugged in,  
19 you could see an arc in that area?

20 MR. AYALA: Form.

21 A. That -- that, I don't -- I don't know if  
22 that's true offhand.

23 BY MR. LAFLAMME:

24 Q. Okay. Regardless, I think we agree,  
25 there wasn't any arcing that was found on any of the

1 internal wiring in the hoverboard, correct?

2 A. That's true.

3 Q. And there wasn't any arcing found on the  
4 house wiring immediately adjacent to where the  
5 hoverboard was located, correct?

6 A. Not that I read about.

7 Q. As an expert doing an investigation, you

8 agree that it's important to have as much

9 information as you can about the fire loss, correct?

10 A. Yes.

11 MR. AYALA: Form.

12 A. In general, yes.

13 BY MR. LAFLAMME:

14 Q. I mean, as an engineer, you want all the  
15 information that's available, right?

16 A. Yes.

17 Q. And you want to have the opportunity to  
18 review all the information that's available during  
19 your investigation.

20 A. Yes.

21 Q. You don't want parts of the  
22 investigation -- or parts of whatever information is  
23 available to be hidden from you, correct?

24 MR. AYALA: Form.

25 A. True.